

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1. (Currently Amended) A system for providing a single telephone number for use with a digital cordless handset and with a second handset, the system comprising:

 a wireless access point wired to a wired data network that provides voice and data services, the wireless access point having a means for communicating with the digital cordless handset via a wireless connection, to provide the digital cordless handset wireless access to the wired data network ~~for the digital cordless handset~~; and

 a media gateway having[[.]]:

 means for interfacing with a data switch, the data switch including programming means to respond to [[a]] routing information in a layer of a switching protocol to route data packets to [[the]] at least one of the digital cordless handset [[and]] or the second handset[[.]];

 means for enabling the wireless access point to generate a ring tone at the digital cordless handset, wherein a call directed toward the second handset ~~corresponding to a single telephone number on a telecommunications network~~ is received at the media gateway, and the telecommunications network ~~generating~~ generates a ring tone at the second handset, the ring tone generated at the second handset corresponding to the call at the second handset, the second handset being communicatively coupled to [[a]] the telecommunications network [[.]]; and

 means for linking the telecommunications network to the wired data network, wherein the digital cordless handset and the second handset, ~~using the telecommunications network~~ are assigned the single telephone number.

2. (Canceled)

3. (Currently Amended) The system of Claim claim 1, wherein the ring tone is at the digital cordless handset, and the ring tone generated at the second handset are generated substantially simultaneously at the digital cordless handset and the second handset.

4. (Currently Amended) The system of Claim claim 1, wherein the telecommunications network comprises a public switched telephone network.

5. (Currently Amended) The system of Claim claim 4, wherein the second handset comprises at least one wired handset connected to the public switched telephone network.

6. (Currently Amended) The system of Claim claim 1, wherein the telecommunications network comprises a wireless telecommunications network comprising means for providing wireless telecommunications on wireless communications frequencies.

7. (Currently Amended) The stem system of Claim claim 6, wherein the second handset comprises means for communicating with the wireless telecommunications network via the wireless communications frequencies.

8. (Currently Amended) A method for providing a single telephone number for use with a plurality of handsets, the method comprising:

employing a processor executing computer executable instructions to perform the following acts :

assigning [[a]] the single telephone number to a first handset of the plurality of handsets, the first handset being using communicatively coupled to a first telecommunications network, wherein the first telecommunications network comprises one or more wireless access points wired to a wired data network, wherein the wired data network provides voice and data services;

assigning the single telephone number to a second handset of the plurality of handsets, the second handset being using communicatively coupled to a second telecommunications network;

providing, for the first handset, via a wireless connection from the one or more wireless access points, wireless access to the wired data network via the wireless access points for the first handset over a wireless connection; and

enabling a media gateway to:

receive a call directed toward the second handset, the second handset being corresponding to associated with the single telephone number and being communicatively coupled to [[on]] the second telecommunications network;

, the media gateway interfacing interface with a data switch for routing information in a layer of a switching protocol to at least one of the first handset [[and]] or the second handset;

, the media gateway enabling enable one of the one or more wireless access points to generate a ring tone at the first handset, and the second telecommunications network to generating generate a ring tone at the second handset corresponding to the call at the second handset corresponding to the call at the second handset; and

, the media gateway linking link the second telecommunications network to the wired data network.

9. (Currently Amended) The method of Claim claim 8, further comprising employing the processor executing computer executable instructions to perform the following acts:

detecting an incoming communication from a calling party to the single telephone number; and

in response to detection of the incoming communication, placing outgoing communications to the first handset and the second handset in response to detecting the incoming communication.

10. (Currently Amended) The method of Claim claim 9, further comprising employing the processor executing computer executable instructions to perform the following acts : connecting the incoming communication to [[the]] a first one of the first handset or the second handset [[:]] to be answered of either the first handset or the second handset.

11. (Currently Amended) The method of Claim claim 10, further comprising employing the processor executing computer executable instructions to perform the following acts : dropping each of the outgoing communications other than [[the]] a one of the outgoing communications associated with the first one of the first handset or the second handset to be answered.

12. (Canceled)

13. (Currently Amended) The method of Claim claim 8, wherein the first handset comprises a digital cordless handset for communicating with the one or more wireless access points via the wireless connection.

14. (Currently Amended) The method of Claim claim 8, wherein the second telecommunications network comprises a wireless network providing wireless telecommunications on wireless communications frequencies.

15[[,]]. (Currently Amended) The method of Claim claim 14, wherein the second handset comprises a wireless device communicating with the wireless network via the wireless communications frequencies.

16. (Currently Amended) The method of Claim claim 8, wherein the second telecommunications network comprises a public switched telephone network.

17[[,]]. (Currently Amended) The method of Claim claim 16, wherein the second handset comprises a wired handset connected to the public switched telephone network.

18-26. (Canceled)

27[.]. (Currently Amended) A system for providing a single telephone number for use with a digital cordless handset and with a second handset, the system comprising:

means for receiving an incoming call directed to [[a]] the single telephone number, wherein the single telephone number is assigned to the digital cordless handset and the second handset;

means for routing the incoming call to the digital cordless handset, wherein the digital cordless handset communicates, via a wireless connection, with a wireless access point wired to a wired data network to provide the digital cordless handset [[for]] wireless access to the wired data network, wherein the wired data network provides voice and data services;

means for routing the incoming call to the second handset[[.]], wherein the second handset communicates with being communicatively coupled to a telecommunications network; and

means for enabling a media gateway to:

receive a call directed toward the second handset, the second handset being associated with the single telephone number and the telecommunications network corresponding to the telephone number on the telecommunications network[[.]];

the media gateway interfacing interface with a data switch for routing information in a layer of a[[.]] switching protocol to at least one of the digital cordless handset [[and]] or the second handset[[.]],

the media gateway enabling enable the wireless access point to generate a ring tone at the digital cordless handset, and the telecommunications network to generating generate a ring tone at the second handset, the ring tone at the second handset being associated with corresponding to the call [[at]] directed toward the digital cordless handset, second handset; and

the media gateway linking link the telecommunications network to the wired data network.

28. (Currently Amended) The system of claim 27, further comprising:
means for placing outgoing ~~calls~~ communications to the digital cordless handset and the second handset[[,]] in response to receiving the incoming call directed to the single telephone number; and

means for connecting the incoming call to a first one of the digital cordless handset to be answered ~~of either~~ the digital cordless handset or the second handset to be answered.

29. (Currently Amended) The system of claim [[27]] 28, further comprising means for dropping each of the outgoing communications other than a one of the outgoing communications associated with the first one of the digital cordless handset or the second handset to be answered.

30. (Previously Presented) The system of claim 1, wherein the means for communicating provides voice-over-internet protocol (VOIP) service to the digital cordless handset.

31. (Currently Amended) The system of claim 1, wherein the means for communicating is wired to the wired data network through a broadband residential gateway, the broadband residential gateway comprising; a broadband modem and a router, and the broadband residential gateway comprises means for enabling being configured to enable another means for communicating to connect to the wired data network.

32. (Currently Amended) The system of claim 1, wherein the means for communicating uses subscriber identity module (SIM) information from the digital cordless handset to determine if a user associated with the digital cordless handset is a subscriber to the wired data network.

33. (Previously Presented) The system of claim 1, wherein the wireless connection comprises an unregulated wireless connection.

34. (Previously Presented) The system of claim 33, wherein the unregulated wireless connection comprises a connection providing wireless service using at least one frequency not assigned to a service provider.

35. (Currently Amended) The method of claim 8[[.]], wherein the wireless connection comprises an unregulated wireless connection.

36. (Previously Presented) The method of claim 35, wherein the unregulated wireless connection comprises a connection providing wireless service using at least one frequency not assigned to a service provider.

37-38. (Canceled)

39. (Currently Amended) The system of claim 27, wherein the wireless[[.]] connection comprises an unregulated wireless connection.

40. (Currently Amended) The system of claim 39, wherein the unregulated wireless connection comprises a[[.]] connection providing service using at least one frequencies frequency not assigned to any service provider.

41. (Previously Presented) The system of claim 6, wherein the wireless communications frequencies comprise regulated wireless communications frequencies.

42. (Previously Presented) The system of claim 41, wherein the regulated wireless communications frequencies comprise frequencies assigned to a service provider.

43. (Previously Presented) The method of claim 14, wherein the wireless communications frequencies comprise regulated wireless communications frequencies.

44. (Previously Presented) The method of claim 43, wherein the regulated wireless communications frequencies comprise frequencies assigned to a service provider.

45-46. (Canceled)

47. (Currently Amended) A media gateway comprising:
means for enabling a wireless access point to generate a ring tone at a digital cordless handset;

means for interfacing with a data switch for routing information in a layer of a switching protocol to at least one of ~~a first the digital cordless~~ handset [[and]] ~~or~~ a second handset[[.]];

means for linking a telecommunications network to a wired data network ~~configured to provide voice and data services~~, the telecommunications network generating a ring tone ~~at the second handset, the ring tone at the second handset~~ corresponding to a call [[at]] ~~directed toward~~ the second handset, wherein the digital cordless handset and the second handset ~~using the telecommunications network~~ are assigned a single telephone number, ~~the second handset being communicatively coupled to the telecommunications network, and~~ the wireless access point being wired to the wired data network, ~~the wireless access point and communicating, via a wireless connection, with the digital cordless[.] handset via a wireless connection~~ to provide wireless access to the wired data network ~~for the digital cordless handset, wherein the wired data network provides voice and data services; and~~

means for receiving the call directed toward the second handset corresponding to the single telephone number on the telecommunications network.

48. (Currently Amended) The media gateway of ~~Claim~~ claim 47, wherein the ring tone ~~at the digital cordless handset, and the ring tone at the second handset~~ [[is]] ~~are~~ generated substantially simultaneously ~~at the digital cordless handset and the second handset~~.

49. (Currently Amended) The media gateway of ~~Claim~~ claim 47, wherein the telecommunications network comprises a public switched telephone network.

50. (Currently Amended) The media gateway of Claim claim 49, wherein the second handset comprises a wired handset connected to the public switched telephone network.

51. (Currently Amended) The media gateway of Claim claim 47, wherein the telecommunications network comprises a wireless telecommunications network providing wireless telecommunications on wireless communications frequencies.

52. (Currently Amended) The media gateway of Claim claim 51, wherein the second handset comprises a wireless device communicating with the wireless telecommunications network via the wireless communications frequencies.

53. (Previously Presented) The media gateway of claim 47, wherein the wireless access point provides voice-over-internet protocol (VOIP) service to the digital cordless handset.

54. (Currently Amended) The media gateway of claim 47, wherein the wireless access point is wired to the wired data network through a broadband residential gateway, the broadband residential gateway comprising: a broadband modem and a router, and being configured to the broadband residential gateway enabling enable another wireless access point to connect to the wired data network.

55. (Currently Amended) The media gateway of claim 47, wherein the wireless access point uses subscriber identity module (SIM) information from the digital cordless handset to determine if a user associated with the digital cordless handset is a subscriber to the wired data network.

56. (Previously Presented) The media gateway of claim 47, wherein the wireless connection comprises an unregulated wireless connection.

57. (Previously Presented) The media gateway of claim 56, wherein the unregulated wireless connection comprises a connection providing wireless service using at least one frequency not assigned to a service provider.

58. (Currently Amended) The system of claim 1, wherein the data switch comprises a signal transfer point [(SIP)] (STP).

59. (New) The system of claim 1, wherein the ring tone at the digital cordless handset and the ring tone at the second handset are each generated based on an assignment of the digital cordless handset and the second handset to the single telephone number, and independent of a user-defined call processing rule, priority or category associated with the digital cordless handset or the second handset.

60. (New) A system for providing communication with a plurality of communication devices, the system comprising:

a first communication terminal communicatively coupled to a first network and adapted to communicate with a first one of the plurality of communication devices;

a second communication terminal communicatively coupled to a second network and adapted to communicate with a second one of the plurality of communication devices, the first one of the plurality of communication devices and the second one of the plurality of communication devices being assigned to a single telephone number;

a media gateway configured to be communicatively coupled to the first network and the second network; and

a data switch communicatively coupled to the media gateway and being configured to receive routing information indicative of an incoming communication intended for the single telephone number and route information associated with the incoming communication to the first one of the plurality of communication devices and the second one of the plurality of communication devices, the information associated with the incoming communication being routed based on the assignment of the first one and the second one of the plurality of communication devices to the single telephone number, independent of a user-defined call

processing rule, priority or category associated with the first one or the second one of the plurality of communication devices.

61. (New) The system of claim 60, wherein the information associated with the incoming communication is indicative of information for generating a ring tone at the first one and the second one of the plurality of communication devices.

62. (New) The system of claim 60, wherein the information associated with the incoming communication is routed to the first one and the second one of the communication devices substantially simultaneously.

63. (New) The system of claim 60, wherein the first communication terminal is a wireless access point communicatively coupled to a data network.

64. (New) The system of claim 60, wherein the first network is an unregulated wireless network.

65. (New) A system for providing communication in a network, the system comprising:

a plurality of communication devices in the network, each of the plurality of communication devices being adapted to be associated with a plurality of selectable telephone numbers, wherein each of the plurality of selectable telephone numbers is associated with one of a plurality of call processing services;

a first communication terminal communicatively coupled to the network and to each of the plurality of communication devices;

a media gateway communicatively coupled to the network; and

a data switch communicatively coupled to the media gateway and configured to receive routing information corresponding to a selected one of the plurality of selectable telephone number and, based on the selected one of the plurality of selectable telephone numbers, process an outgoing communication to receive an associated one of the plurality of call processing services.

66. (New) The system of claim 65, wherein one or more of the plurality of call processing services may be dynamically associated with one or more of the plurality of selectable telephone numbers.